



PATENT
514413-3911

AT/zw

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS AND INTERFERENCES

Appellant : BICKERS et al.
U.S. Serial No. : 10/049,410
Filing Date : February 7, 2002
For : HERBICIDAL COMPOSITIONS COMPRISING POST-
EMERGENCE HERBICIDES FOR SOIL APPLICATION
Examiner: : Alton Pryor
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Signature

April 11, 2005

Date of Signature

APPEAL BRIEF UNDER 37 C.F.R. 41.37

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Sir:

This is an appeal filed in response to the Final Rejection of claims 14, 15 and 17 in the Office Action (Final Rejection), dated September 9, 2004. This Brief is submitted in triplicate.

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This Brief is accompanied by a check for the requisite amount fee of \$500.00 as set forth in 37 C.F.R. 1.17(f). The Assistant Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0320.

As the Notice of Appeal was filed on 9 February 2005, it is believed that no extension of time is necessary. The Assistant Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0320.

(I) REAL PARTY IN INTEREST

The real party in interest in this appeal is the assignee, Bayer CropScience AG, who is the owner of this application by assignment from Aventis CropScience GmbH.

(II) RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any related appeals or interferences which directly affect or are directly affected by or have bearing on the Board's decision in the pending appeal.

(III) STATUS OF CLAIMS

Claims 14, 15 and 17 were finally rejected in the Office Action dated September 9, 2004. Claim 18 stands allowed. This appeal contests the rejection of claims 14, 15 and 17.

(IV) STATUS OF AMENDMENTS

Appellant filed a Response under 37 C.F.R. 1.116 (which did not include amendments to the claims) on December 8, 2004, which paper was considered but not deemed to place all the claims into condition for allowance, as stated in the Advisory Action dated January 10, 2005.

(V) SUMMARY OF CLAIMED SUBJECT MATTER

Claim 14 is directed toward controlling the growth of undesirable plants pre-emergently (the composition described is like that of claim 17, support for which is described below). Support for this claimed method can be found, e.g. on page 3, lines 16-19 of the specification and originally filed claim 13.

Claim 15 is dependent upon claim 14 and support for this claimed method can be found, e.g. on page 15 and 16 (Example B.2) of the specification and originally filed claim 11.

Claim 17 is directed to a pre-emergence herbicidal composition and support for the claimed subject matter can be found, e.g., on page 3, lines 8-14 and originally filed claim 1.

(VI) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

There are two issues to be decided on appeal:

- (1) Whether claims 14, 15 and 17 were properly rejected as being anticipated by Narayan et al. (U.S. Patent 5,231,070).
- (2) Whether claims 14, 15 and 17 were properly rejected as being anticipated by Sanders (U.S. Patent 5,635,447)

Claims 14 and 15 are directed toward a method of controlling the growth of undesirable harmful plants pre-emergently and are argued separately from claim 17 which is directed toward a pre-emergence herbicidal composition.

(VII) ARGUMENTS

I. Standard of Review for Anticipation Rejections

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); see also MPEP 2131. Moreover, “[t]he single reference must describe and enable the claimed invention, including all claim limitations, with sufficient clarity and detail to establish that the subject matter already existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention.” *Crown Operations International, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1375, 62 USPQ2d 1917, 1921 (Fed. Cir. 2002).

II. Claims 14 and 15 are not anticipated by either Narayan or Sanders

A. Every element of the claimed invention has not been taught

Claims 14 and 15 are method claims and include the elements of "controlling the growth of undesirable harmful plants pre-emergently with a post-emergence herbicide, said method comprises applying a herbicidal composition to an environment where said undesirable plant will reside prior the emergence of said harmful plants".

Both the Narayan and Sanders references lack two elements from the above described portion of claims 14 and 15:

- (a) Narayan:

- (i) teaches a method of inhibiting the leaching of an active plant growth regulating agrichemical NOT controlling the growth of undesirable harmful plants pre-emergently;
- (ii) does NOT teach that controlling the growth of undesirable harmful plants pre-emergently can be accomplished with a post-emergence herbicide;

(b) Sanders:

- (i) teaches enhancing the absorption/penetration of an herbicide into a plant cell/tissue NOT controlling the growth of undesirable harmful plants pre-emergently;
- (ii) does NOT teach that controlling the growth of undesirable harmful plants pre-emergently can be accomplished with a post-emergence herbicide

(Both Narayan and Sanders also do not teach the compositions used claims 14 and 15. However, given that the above elements are not taught, this is a moot point. The arguments below regarding the composition of claim 17 can also be considered to be repeated here.)

B. There is no factual support for reliance on inherent properties or for the Examiner's opinions regarding the Narayan and Sanders references

Whether an invention is anticipated is a question of fact. *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 299, 302, 36 USPQ2d 1101, 1103 (Fed. Cir. 1995).

The Examiner's office actions never indicated that either Narayan or Sanders taught controlling the growth of undesirable weeds pre-emergently. Therefore, it can only be presumed that the Examiner believes that the method of use taught in Narayan or Sanders inherently encompasses controlling the growth of undesirable weeds pre-emergently.

With regard to inherency, MPEP 2112, sec. IV (Requirements of Rejection Based on Inherency; Burden of Proof) states in part “The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).....To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)(citations omitted). The appellants cannot

comment on the extrinsic evidence because no extrinsic evidence has been provided by the Examiner which serves to provide factual support for the Examiner's position that the method of use taught by Narayan and Sanders inherently teaches the appellants' method of use.

There is also no factual support for the Examiner's opinion that Narayan and Sanders, by teaching application of compositions pre- and post-emergently, meet the limitations of claims 14 and 15, i.e. controlling the growth of undesirable harmful plants pre-emergently can be accomplished with a post-emergence herbicide. Both the Narayan and Sanders reference teach the use of herbicides for their art-recognized effects, i.e. use of a **pre-emergent** herbicide to treat harmful plants **pre-emergently** or the use of **post-emergent** herbicide to treat harmful plants **post-emergently**. Narayan and Sanders do not teach the use of **POST-emergent** herbicides to treat harmful plants **PRE-emergently**. If there is a factual basis which indicates otherwise, it has not been presented by the Examiner.

The Examiner's statement on page 2, lines 13-14 of the final rejection that there is no express teaching in Narayan which indicates that post-emergent herbicides cannot be used pre-emergently stands the PTO's evidentiary burden on its head, i.e. it is the initial burden of the Office to show that the claimed invention was taught and anticipated by Narayan and Sanders NOT for the appellant to prove what was not taught by Narayan and Sanders. The fact that the Examiner cannot affirmatively show the appellants' claim element of controlling the growth of undesirable harmful plants pre-emergently being accomplished with a post-emergence herbicide exists from with the Narayan and Sanders reference is also evidence that Narayan and Sanders fails the "sufficient clarity and detail" test for establishing anticipation, i.e. without the appellants' claims to serve as a treasure map, one of ordinary skill in the art would not have recognized the claimed subject matter already existed within Narayan and Sanders (because it does not exist) and that its existence was recognized by persons of ordinary skill in the field of the invention."

Therefore, because Narayan and Sanders do not teach every element of the appellants' invention and/or because there is no factual support for the Examiner's opinions regarding anticipation or inherency, the rejection of claims 14 and 15 based on anticipation was improper and should be REVERSED.

III. Claims 17 is not anticipated by either Narayan or Sanders

While the Narayan and Sanders references have a broad recitation for the use of a post-emergence herbicide and a carrier material, these references do not anticipate the claimed compositions as they fail the "sufficient clarity and detail" test.

Both Narayan and Sanders have broad recitations regarding the nature of carrier material such that they could be viewed as encompassing of polymers based on acrylic acid or methacrylic acid. However, it is readily apparent that Narayan and Sanders preferred carriers (N-alkenyl lactam homopolymers and polyaspartic acid respectively) are not those claimed by the appellants. The appellants are not asserting that teachings besides the claimed invention of Narayan and Sanders cannot be considered. Rather, because Narayan and Sanders refers to a large genus of alternative carriers, there is no reason to select the carriers claimed by the appellants when the teaching of the prior art were so clearly directed to N-alkenyl lactam homopolymers (Narayan) and polyaspartic acid (Sanders). Therefore, there was never any teaching with sufficient clarity and detail that would indicate to one of ordinary skill in the art that a post-emergent herbicide could be combined with a carrier material selected from the group consisting of fuller's earth, aerogels, high-molecular weight polyglycols, and polymers based on acrylic acid, methacrylic acid and copolymers thereof.

In addition, it is not taught with sufficient clarity or detail that the amount of post-emergent herbicide combined with a carrier material selected from the group consisting of fuller's earth, aerogels, high-molecular weight polyglycols, and polymers based on acrylic acid, methacrylic acid and copolymers thereof is the same or is encompassed by the teaching of Narayan and Sanders. There are several wrinkles in this analysis that it cannot be readily assumed that Narayan and Sanders are inherently teaching the same composition.

Firstly, the intended method for using these compositions are different as was described above. Therefore, it is the Examiner's burden to show that an effective amount of post-emergence herbicide is the same as the amount of post-emergence herbicide used to inhibit leaching as in Narayan or enhancing the absorption/penetration of an herbicide as in Sanders

when used in combination with a carrier material selected from the group consisting of fuller's earth, aerogels, high-molecular weight polyglycols, and polymers based on acrylic acid, methacrylic acid and copolymers thereof. No evidence has been presented to show that this is true.

Secondly, based on the teachings of Narayan and Sanders, one of ordinary skill in the art would be motivated to use post-emergence herbicides for their art recognized purpose, i.e. to treat harmful plants post-emergently. There is no evidence or indication from Narayan and Sanders that this amount of **POST**-emergence herbicide would be the same or encompassed by the amount of post-emergence herbicide necessary to treat harmful plants **PRE**-emergently.

As stated above, establishing an anticipation rejection based on inherency must also rely on extrinsic evidence not possibilities or probabilities and there has never been any evidence which supports the Examiner's assumptions based on inherency.

Therefore, the herbicidal compositions of claim 17 is not anticipated because the carrier system and the amount of post-emergent herbicide used in combination with the carrier system is not disclosed with specific clarity or detail and because positions regarding inherency have only been supported with general assumptions and not extrinsic evidence. This rejection should also be properly REVERSED.

(VIII) CLAIMS APPENDIX

NOTE: Formatting for claims 14 and 17 has been modified for easier readability

Claims 1-13 (cancelled)

Claim 14 (previously presented)

14. A method for controlling the growth of undesirable harmful plants pre-emergently with a post-emergence herbicide, said method comprises applying a herbicidal composition to an environment where said undesirable harmful plant will reside prior to the emergence of said harmful plants,

wherein the herbicidal composition comprises an effective amount of one or more post-emergence herbicides and an amount of a carrier material selected from the group consisting of fuller's earth, aerogels, high-molecular-weight polyglycols and polymers based on acrylic acid, methacrylic acid and copolymers thereof,

with the proviso that the herbicidal composition does not comprise paraquat and fuller's earth.

Claim 15 (previously presented)

15. The method according to claim 14, wherein the environment further comprises a crop of useful plants and the herbicidal composition further comprises a herbicidally active compound to which the crops of useful plants are tolerant.

Claim 16 (cancelled)

Claim 17 (previously presented)

17. A pre-emergence herbicidal composition, which comprises an effective amount of one or more post-emergence herbicides and an amount of a carrier material selected from the group consisting of fuller's earth, aerogels, high-molecular-weight polyglycols and polymers based on acrylic acid, methacrylic acid and copolymers thereof,

with the proviso that herbicidal compositions comprising paraquat and fuller's earth shall be excluded.

Claim 18 (previously presented - allowed)

18. A method for controlling the growth of undesirable harmful plants pre-emergently with a post-emergence herbicide, said method comprises applying a herbicidal composition to an environment where said undesirable harmful plants will reside prior to the emergence of said harmful plants and

wherein the environment comprises a crop of useful plants, which are genetically modified, and

the herbicidal composition further comprises a herbicidally active compound to which the crops of useful plants are tolerant,

wherein said herbicidal compositions comprise an effective amount of one or more pre-emergence herbicides and an amount of a carrier material selected from the group consisting of fuller's earth, aerogels, high-molecular weight polyglycols and polymers based on acrylic acid, methacrylic acid and copolymers thereof,

with the proviso that the herbicidal composition does not comprise paraquat and fuller's earth.

(IX) EVIDENCE APPENDIX

NONE

(X) RELATED PROCEEDINGS APPENDIX

NONE

CONCLUSION

In view of the foregoing, it is respectfully submitted that the claims on appeal are patentable and that the rejection under 35 U.S.C. §103(a) should be reversed.

Respectfully submitted,

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